

Claims:

8/17
1. A method of indicating occurrence of an event from a redundant array of inexpensive disks (RAID) monitor service to a management application, comprising:

5 registering the management application with an event application programming interface;

detecting occurrence of an event with the RAID monitor service; and

notifying the management application program of the event via the event application programming interface.

10 2. The method of claim 1, further comprising updating the event application programming interface with the RAID monitor service upon occurrence of the event.

15 3. The method of claim 1, wherein registering the management application includes identifying a storage medium associated with the event.

4. The method of claim 1, wherein registering the management application includes identifying the type of event.

20 5. The method of claim 1, wherein registering the management application includes providing the event application programming interface with a callback function.

6. The method of claim 5, wherein the event application programming interface uses the callback function to notify the management application of the occurrence of the event.

5 7. The method of claim 1, wherein registering the management application includes creating an interprocess communication between the RAID monitor service and the management application.

10 8. The method of claim 1, further comprising the step of unregistering the management application with the event application programming interface upon notification of the event.

15 9. The method of claim 1, wherein the event application programming interface returns a callback function upon notification of the event.

10. A method for notifying an application of the occurrence of a hardware event

comprising:

registering the application with a programming interface; and

upon occurrence of the hardware event, notifying the application.

5

11. The method of claim 10, wherein registering the application includes:

allocating a data storage location; and

storing data in the data storage location.

12. The method of claim 11, wherein storing the data includes storing data

identifying an input/output processor.

13. The method of claim 11, wherein storing the data includes storing data

identifying the hardware event that the programming interface notifies the application of

once the hardware event has occurred.

14. The method of claim 11, wherein storing the data includes storing a hardware

identification value that identifies a storage medium associated with the event.

15. The method of claim 10, further comprising notifying the programming

interface of the occurrence of the hardware event with a RAID monitor service.

16. The method of claim 10, wherein notifying the application includes providing a

callback function.

CONFIDENTIAL

17. An article comprising:

5 a machine readable storage medium having stored thereon instructions capable of being executed by a data processing platform, said instructions being adapted to register a management application with a programming interface so that the programming interface is capable of notifying the management application of an event from a RAID monitor service.

10 18. The machine readable storage medium of claim 17, wherein said instructions are further adapted to unregister the management application.

15 19. The machine readable storage medium of claim 17, wherein said instructions are further adapted to notify the management application of a hardware event.

20 20. The machine readable storage medium of claim 19, wherein the hardware event is selected from the group consisting of a disk drive failure, disk drive initialization, array migration, and data recovery.

21. The machine readable storage medium of claim 17, wherein said instructions are further adapted to register a processor identification value.

22. An article comprising:

a processor;

a medium for storing instructions;

a medium for storing data;

5 wherein instructions on the medium for storing instructions are adapted to cause the processor to indicate the occurrence of an event with the medium for storing data from a programming interface to a management application.

23. The article of claim 22, wherein the management application is selected from the group consisting of a desktop management program, a RAID system management application, and a RAID monitor application.

24. The article of claim 22, further comprising a RAID monitor service.

25. The article of claim 24, further comprising an intelligent input/output controller.

26. An apparatus comprising:

a processor;

a RAID monitor service;

an event programming interface;

5

a management application, wherein the event programming interface is adapted to notify the management application of an event from the RAID monitor service.

27. The apparatus of claim 26, further comprising a storage medium, wherein the storage medium comprises instructions that cause the processor to register the management application with the event programming interface.

10
667227-1173346

28. The apparatus of claim 27, wherein the storage medium further comprises instructions that cause the processor to provide the function of the event programming interface.